

## NPS and NASA Teacher Workshop: Making the Sun-Earth Connection



Join the National Park Service (NPS) and National Aeronautics and Space Administration (NASA) for an exciting hands-on workshop that offers teachers a variety of ways to explore the Sun-Earth system with their 1st-5th grade students! Also explore how the Sun influences the native plants and reptiles of the Santa Monica Mountains, and learn about the Sun-Earth connections of the Chumash.

**Date:** July 23-24, 2010

**Time:** 8:30 am - 5:00 pm on 7/23 and  
9:00 am - 5:00 pm on 7/24

**Location:** Santa Monica Mountains National Recreation Area, Thousand Oaks, CA

**Registration and Materials Fee:** A non-refundable \$35.00 materials fee is required of all participants in advance of the workshop. Please see registration form for more details.

**Registration Deadline:** Friday, July 2, 2010. Workshop is filled on a first-come, first-served basis.

**Continuing Professional Education (CPE) Credit:** One (1) credit is available through California Lutheran University for this course. There is an \$80.00 fee which will be collected on the first day of the workshop payable to California Lutheran University. Registration forms will be available and completed at the workshop. Continuing Professional Education Credits are not applicable to credentials or graduate programs. They are designed to meet the continuing education requirements for teachers in California. Not all districts will accept these credits for salary allocation. Participants are responsible for checking with their district's salary allocation department and/or their collective bargaining agreement for information on the applicability of these credits.

**Course Details:** Ruth Paglierani, Coordinator for Public Programs from the Center for Science Education at the Space Sciences Lab, University of California, Berkeley, will present a wide variety of hands-on curriculum-based lessons and activities including:

### Eye on the Sky: Our Star, the Sun

- Eye on the Sky Curriculum Overview
- UV Beads
- Sun-Earth-Moon Model
- Create Sun Books

The Sun's influence on the land and the Chumash will also be explored. Speakers are scheduled to discuss:

Seasons in the Sun: Plant Growth and Survival in the Mediterranean Climate

(This is an indoor and outdoor session with a short walk.)

- Mediterranean Biome of Southern California
- Relationship of light, heat and water loss in plants
- Plant energy budgets
- Plant challenges and adaptations for managing light and heat
- Vegetation distribution patterns as determined by light and heat

Sunbathers of the Santa Monica Mountains...How Do Reptiles Stay Warm?

(This is an indoor and outdoor session.)

- Common reptiles of the Santa Monica Mountains
- Thermoregulation of reptiles

California's First Sun Watchers

- Three-dimensional sun symbol activity
- Shell rattle activity and sun stories of the Chumash

Archaeoastronomy

- Sun watching and solar practices
- Burrow Flat (Chumash) site
- Sun lore of the Chumash and other American Indians

This year we have added a short session on climate change resources and projects which will introduce you to NASA resources, and Project BudBurst, a monitoring program for citizens (including your students!) which helps scientists understand the pace of climate change.

**For more information:** Call 805-370-2348, ext. 203, or e-mail Lisa Okazaki, Education Specialist, at [lisa\\_okazaki@nps.gov](mailto:lisa_okazaki@nps.gov).

**To Register for the Workshop:** Complete and mail-in the registration form (Page 3 & 4).



## Santa Monica Mountains National Recreation Area 2010 Teacher Workshop Registration Form

NPS and NASA Teacher Workshop:  
Making the Sun-Earth Connection  
July 23-24, 2010

### Registration Information

A valid registration includes this completed form (2 pages) and payment of the \$35.00 materials fee. A separate registration form is required for each participant.

Registration deadline is Friday, July 2, 2010.

- Please make your \$35.00 check payable to Western National Parks Association.
- Mail registration form and check to:  
Santa Monica Mountains National Recreation Area  
Attn: Education Programs, Barbara Applebaum or Lisa Okazaki  
401 West Hillcrest Drive  
Thousand Oaks, CA 91360
- Fees are non-refundable.
- We cannot hold reservations without payment.
- Workshops are filled on a first-come, first-served basis.

### Participant Information

Participant Name \_\_\_\_\_ Grade You Teach \_\_\_\_\_

Mailing Address \_\_\_\_\_

School \_\_\_\_\_ School District \_\_\_\_\_

School Address \_\_\_\_\_

Home Phone # \_\_\_\_\_ Cell Phone # \_\_\_\_\_

Work Phone # \_\_\_\_\_ E-mail Address \_\_\_\_\_

How did you hear about the workshop? \_\_\_\_\_

Do you have any accessibility needs that we should be aware of? \_\_\_\_\_

\_\_\_\_\_

(continued)

**Continuing Professional Education (CPE) Credit**

Continuing Professional Education credit is available through California Lutheran University. Registration for CPE credit will take place on the first day of the workshop.

Are you taking the workshop for Continuing Professional Education Credit? Yes\_\_\_\_ No\_\_\_\_

**Pre-Workshop Questions**

What have you traditionally taught in science? \_\_\_\_\_

\_\_\_\_\_

How much time per week do you spend teaching science? \_\_\_\_\_

Are you a Science Resource Specialist? \_\_\_\_\_

Do you train other teachers? Yes\_\_\_\_ No\_\_\_\_

***Thank you for registering!***